JOURNAL

OF THE

New York Entomological Society.

Vol. II.

DECEMBER, 1894.

No. 4.

NOTES ON PHALANGIDÆ.

By NATHAN BANKS.

Trachyrhinus favosus *Wood* is found in Colorado, (C. F. Baker). Some males are wholly black.

Trachyrhinus marmoratus, nov. sp.

Length \int_{0}^{3} 5, mm.; width 4, mm.; femur 1–6, mm.; femur 1V–9, mm. Above pale brown mottled with darker brown, generally outlining the vase-mark, and some scattered whitish dots; a pale line from eye-tubercle to anterior margin, and each side a brown line; behind eye-tubercle a short transverse brown ine; eye-tubercle whitish above. Mandibles white with brown patches, palpi similar; sternum, venter, coxæ, and trochanters white, mottled with dark brown patches much the largest on the coxæ; femora pale, brownish toward tip; patella brown with a narrow white line above; tibia brownish, with a white patch at tip; metatarsus pale; tarsus darker, nearly black at tip. Having the same general structure as *T. farosus*, the deeply pitted dorsum, granulate coxæ, and projection to patella of palpus. The eye-tubercle is less spinose (with two rows of five spinules), the legs are longer and thinner, the spinules white and those on the coxæ rounded, so as to appear more like granules.

Several males from Santa Fé, New Mexico (alt. 7000 ft.); T. D. A. Cockrell, collector.

Liobunum townsendi Weed occurs at Brownwood, Tex.

Liobunum longipes Weed is found at Washington, D. C.

Liobunum bicolor Wood. A variety of this species occurs of Kissimmee, Florida; there are a few spinules at each posterior corner of the large raised patch; and there are two pale diverging lines in front of the eye-tubercle; the legs are longer than in typical L, bicolor.

Liobunum formosum *Wood.* I consider this a very good species, and not the young of *L. ventricosum* Wood. Wood decribed bothfrom females. His specimens could not have been very young, since he does not mention the projections to the tibia and patella

of the palpus, and the size was .3 of an inch. I have from Long Island, N. Y., and Washington, D. C., adult males and females of *L. formosum*, extremely similiar to the young, but little larger than Wood's specimen, and as large as *L. ventricosum*. They agree with the description throughout, black trochanters, dark bands on the legs, and in the \mathcal{J} the tibia wholly dark; a prominent vase-mark in the \mathcal{J} , in the \mathcal{J} indistinct; the legs are shorter and much thicker than in *L. ventricosum*, and the \mathcal{J} abdomen is not near as conical.

Liobunum ventricosum *Wood*. This has the trochanters no darker than the dorsum, the vase-mark obscure, and the legs unbanded. The legs are much more delicate than in *L. formosum*. I have it from New Hampshire (Mrs. Slosson) and Long Island, N.Y.

Leptobunus grande Say. Prof. Weed (Ohio Phalangidæ) thinks *L. maculosum* Wood may be the young of Say's species; but Wood described the genitalia of his species so it cannot be young.

NOTE ON THE DEVELOPMENT OF DELTOCEPHALUS INIMICUS Say.

By F. M. WEBSTER.

Several years ago, on November 11, a number of adults were placed on young wheat plants that had been reared indoors, and hence were free from affection by insect attack. The females began at once to oviposit in the tissue of the leaves, and the young could be observed developing within the eggs, especially after they had become well advanced. Young were especially noticeable just prior to their emerging by their eyes being jet black. The young moulted a few days after hatching, and, so far as I could observe, but twice afterwards. December 22, one of the first individuals to appear moulted for the last time, and on the following day adults were out in numbers. It will be observed that 41 days were required for the development of the insect from egg to adult. It is not unlikely that the species hibernates in the egg state in the leaves of grass, though it would seem possible that it may also live over as adults. My wheat plants were kept growing in glass tubes, probably an inch and a half in diameter, and in a temperature of probably not far from 70° Fah.

Material, kept for description, has been spoiled by age and it is now impossible to describe the earlier stages from it, else such would be included in this note.

[VOL. II.